

# PSII and HPPD Herbicide POST Tank Mixes

## Janesville, WI 2024

### Trial Information

Trial Sponsor: Wisconsin Cropping Systems Weed Science,  
Wisconsin Corn Growers Association

Objective: Evaluate the efficacy of atrazine alternative PSII-  
and HPPD-inhibitor herbicide tank mixes for  
control of giant ragweed

Crop: Corn

Hybrid: 202-24STX RIB

Weed species (pressure): giant ragweed (high-very high)

Herbicide Application(s): PRE – 5/6  
POST – 6/6 (V5 corn)

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For the full report see trial #24-ROK-CN12 in the [2024 Wisconsin Weed Science Research Report](#)  
Also, check out this [article](#) by Daniel Zhu discussing his project in more detail!



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Trt #	Herbicide (rate acre <sup>-1</sup> )	Corn Injury <sup>c</sup> (%)			G. Ragweed (%)			Yield <sup>b</sup> bu acre <sup>-1</sup>
		6 DAT	15 DAT	27 DAT	15 DAT	27 DAT	EOS <sup>e</sup>	
		0	0	0	0	0	0	
1	Check (PRE Only)	0	0	0	0	0	0	7 g
2	Weed Free Check							
2	Roundup PowerMAX 3 (30 oz) + Liberty (32 oz) + AMS (2.5%) <b>fb</b> hand weeding (as necessary)	0	0	0	100	100	100	228 a
<b>Two-Pass – PRE<sup>d</sup> (5/10) <b>fb</b> POST (6/6)</b>								
PSII Only	3 Moxy 2E (1 pt) + COC (1%) + AMS (2.5%)	19.8	8.3	0.1	81	69	60	187 bc
	4 Basagran 5L (1.2 pt) + COC (1%) + AMS (2.5%)	1.1	1.4	1.0	67	42	31	131 de
	5 Metricor DF (4 oz) + COC (1%) + AMS (2.5%)	50.0	29.9	9.0	42	19	21	45 f
HPPD Only	6 Callisto (3 oz) + COC (1%) + AMS (2.5%)	1.1	3.3	2.7	53	30	27	100 e
	7 Armezon (0.75 oz) + COC (1%) + AMS (2.5%)	1.7	1.8	1.3	83	74	61	193 bc
PSII + HPPD	8 Callisto (3 oz) + Moxy 2E (1 pt) + COC (1%) + AMS (2.5%)	25.1	13.9	1.5	97	93	95	216 ab
	9 Callisto (3 oz) + Basagran 5L (1.2 pt) + COC (1%) + AMS (2.5%)	6.1	4.3	1.0	94	87	90	205 ab
	10 Callisto (3 oz) + Metricor DF (4 oz) + COC (1%) + (2.5%)	50.1	33.3	15.0	86	79	84	189 bc
	11 Armezon (0.75 oz) + Moxy 2E (1 pt) + COC (1%) + AMS (2.5%)	22.5	18.7	2.0	94	88	82	212 ab
	12 Armezon (0.75 oz)+Basagran 5L (1.2 pt)+COC (1%) +AMS (2.5%)	8.6	2.7	1.3	95	88	93	213 ab
	13 Armezon (0.75 oz) + Metricor DF (4 oz) +COC (1%) +AMS (2.5%)	50.0	38.6	15.0	78	59	50	162 cd
	LSD ( $\alpha=0.05$ )	1.7	2.3	1.6	4	6	6	13
	p value	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

<sup>a</sup>Visual control from 70-100% is illustrated on a color scale with green representing greater weed control values.

<sup>b</sup>Yield values with the same letter are not significantly different.

<sup>c</sup>Corn injury = leaf necrosis (burn)

<sup>d</sup>Verdict (10 fl oz/a) was applied PRE over the entire trial area including the checks (treatments #1 and #2)

<sup>e</sup>EOS = end-of-season weed control rating

# PSII and HPPD Herbicide POST Tank Mixes

## Janesville, WI 2024

Plot pictures taken on 6/12

33 days after the PRE application  
6 days after the POST application

The number in the upper right-hand corner is the average % corn injury (leaf necrosis) of 4 replications

**33 days after PRE (6/12)  
PRE: 10 oz Verdict (Check)**

**0%**



**6 days after POST (6/12)**

**PRE: 10 oz Verdict fb**

**POST: 30 oz Roundup PM3 + 32 oz Liberty + AMS**

**0%**



**6 days after POST (6/12)**

**PRE: 10 oz Verdict *fb***

**POST: 1 pt Moxy 2E + COC + AMS**

**20%**



**6 days after POST (6/12)**

**PRE: 10 oz Verdict *fb***

**POST: 1.2 pt Basagran 5L + COC + AMS**

**1%**



**6 days after POST (6/12)**

**PRE: 10 oz Verdict *fb***

**POST: 4 oz Metricor DF + COC + AMS**

**50%**



**6 days after POST (6/12)**  
**PRE: 10 oz Verdict fb**  
**POST: 3 oz Callisto + COC + AMS**

**1%**



**6 days after POST (6/12)**

**PRE: 10 oz Verdict fb**

**POST: 0.75 oz Armezon + COC + AMS**

**2%**



**6 days after POST (6/12)**

**PRE: 10 oz Verdict *fb***

**POST: 3 oz Callisto + 1 pt Moxy 2E + COC + AMS**

**25%**



**6 days after POST (6/12)**

**PRE: 10 oz Verdict fb**

**POST: 3 oz Callisto + 1.2 pt Basagran 5L + COC + AMS**

**6%**



**6 days after POST (6/12)**

**PRE: 10 oz Verdict fb**

**POST: 3 oz Callisto + 4 oz Metricor DF + COC + AMS**

**50%**



**6 days after POST (6/12)**

**PRE: 10 oz Verdict fb**

**POST: 0.75 oz Armezon + 1 pt Moxy 2E + COC + AMS**

**23%**



**6 days after POST (6/12)**

**PRE: 10 oz Verdict fb**

**POST: 0.75 oz Armezon + 1.2 pt Basagran 5L + COC + AMS**

**9%**



**6 days after POST (6/12)**

**PRE: 10 oz Verdict fb**

**POST: 0.75 oz Armezon + 4 oz Metricor DF + COC + AMS**

**50%**



# PSII and HPPD Herbicide POST Tank Mixes

## Janesville, WI 2024

Plot pictures taken on 6/21

42 days after the PRE application  
15 days after the POST application

The number in the upper right-hand corner is the average % giant ragweed control of 4 replications

**42 days after PRE (6/21)  
PRE: 10 oz Verdict (Check)**

**0%**



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 30 oz Roundup PM3 + 32 oz Liberty + AMS

100%



**15 days after POST (6/21)**

**PRE: 10 oz Verdict fb**

**POST: 1 pt Moxy 2E + COC + AMS**

**81%**



4

15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 1.2 pt Basagran 5L + COC + AMS

67%



**15 days after POST (6/21)**

**PRE: 10 oz Verdict fb**

**POST: 4 oz Metricor DF + COC + AMS**

**42%**



1

**15 days after POST (6/21)**

**PRE: 10 oz Verdict fb**

**POST: 3 oz Callisto + COC + AMS**

**53%**



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 0.75 oz Armezon + COC + AMS

83%



**15 days after POST (6/21)**

**PRE: 10 oz Verdict fb**

**POST: 3 oz Callisto + 1 pt Moxy 2E + COC + AMS**

**97%**



**15 days after POST (6/21)**

**PRE: 10 oz Verdict fb**

**POST: 3 oz Callisto + 1.2 pt Basagran 5L + COC + AMS**

**94%**



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 3 oz Callisto + 4 oz Metricor DF + COC + AMS

86%



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 0.75 oz Armezon + 1 pt Moxy 2E + COC + AMS

94%



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 0.75 oz Armezon + 1.2 pt Basagran 5L + COC + AMS

95%



15 days after POST (6/21)

PRE: 10 oz Verdict *fb*

POST: 0.75 oz Armezon + 4 oz Metricor DF + COC + AMS

78%

